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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,723	11/02/2000	Srihar Ramesh	219.39043X00	2135

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EXAMINER

TAKAOKA, DEAN O

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 05/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/703,723	RAMESH, SRITHAR	
	Examiner	Art Unit	
	Dean O Takaoka	2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-8 and 13-24 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Korcharz et al. (U.S. Patent No. 5,828,558).

Claim 1:

Korcharz et al. (Fig. 6) shows a circuit for removing noise on a voltage input line, comprising: a ferrite bead (156) and a bulk capacitor (174) with low equivalent series resistance (low ESR – col. 14, lines 13-18) connected between an output side of the ferrite bead and ground.

Claim 9:

Korcharz et al. shows the ferrite bead and low ESR capacitor, discussed in the reasons for rejection of claim 1 above.

The limitations contained in the preamble are given no patentable weight by the Examiner. The “method” is generic, thus Korcharz et al. anticipates the generic method by showing the final product, inherently made by a method. The limitation “removing switching regulator noise from a voltage supply line” breathes no life into the claim. The body of the claim does not suggest the use in a “switching voltage regulator”, thus is considered intended use and given no patentable weight by the Examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korcharz et al. in view of Vishay Sprague (catalog pages 114 – 120).

Claim 2:

Korcharz et al. (Fig. 6) shows a well-known generic high frequency electrolytic capacitor (col. 14, lines 14-18) where the term “high frequency” is an open term not defined by the claim.

Vishay Sprague shows well-known art-recognized equivalent specific high frequency tantalum electrolytic “D” capacitors (frequency curves shown on page 118; “D” type ratings shown on page 115).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the well-known generic electrolytic capacitor disclosed by Korcharz et al. with the well-known art-recognized equivalent specific high frequency tantalum electrolytic “D” capacitors disclosed by Vishay Sprague. Such a modification would have been a mere substitution of well-known art-recognized equivalent electrolytic capacitors, further in that Korcharz et al. teaches the circuit operating at various input voltages such as 24 and 48V (Korcharz et al. - col. 2, line 55) and where the low ESR capacitor (174) is 1uf, thus in view of the rating chart shown by

Vishay Sprague, the low ESR capacitor obviously a "D" rating type, thus suggesting the obviousness of the modification.

Claim 3:

Where the capacitor has a series resistance of approximately 0.8 ohms (shown by Vishay Sprague graph of impedance for 1uf @ 50V DC, page 118).

Claims 10 and 11:

The limitations are obvious and discussed above in the reasons for rejection of claims 2 and 3.

Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korcharz et al. and Vishay Sprague and further in view of TDK (catalog pages 2 – 4).

Claims 4 and 12:

Korcharz et al. and Vishay Sprague show the circuit for removing noise on a voltage input line where Korcharz et al. shows the well-known generic ferrite bead (156).

Korcharz et al. and Vishay Sprague are silent for the well-known ferrite bead having a series resistance of 0.3 ohms.

TDK shows well-known art-recognized equivalent specific ferrite beads with series resistance of 0.3 ohms.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the well-known generic ferrite bead disclosed by Korcharz et al. and Vishay Sprague with the well-known art-recognized specific

ferrite bead with series resistance of 0.3 ohms disclosed by TDK. Such a modification would have been a mere substitution of well-known art-recognized equivalent ferrite beads thus suggesting the obviousness of the modification.

Allowable Subject Matter

Claims 5 – 8 and 13 – 24 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Korcharz et al. shows the filtering of the ferrite bead and low ESR capacitor at the input of the voltage regulator.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bickley – shows a ferrite bead connected to the output of switch 108.

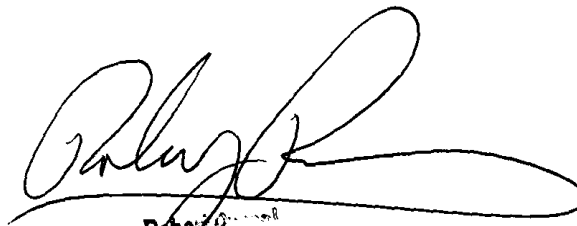
Muller – shows a ferrite bead and “Sprague” tantalum D type capacitor filtering noise to the input of the regulator (46).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dean O Takaoka whose telephone number is (703) 305-6242. The examiner can normally be reached on 8:30a - 5:00p Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (703) 308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

dot
May 7, 2003



Robert J. [illegible]
Supervisor, Examiner
Technology